

**Abstract**

The invention relates to an aqueous solution comprising the following components: Zn(II) ions, Sn(II) ions, aliphatic carboxylic acids and/or their alkaline salts, anionic surfactants, non-ionogenic surfactants and optionally aromatic aldehydes, aromatic ketones, aromatic carboxylic acids and heterocyclic carboxylic acids or their alkaline salts or conducting salts. The inventive solution provides a means for electrodepositing uniform light-colored tin-zinc alloys without having to use cyanide ions, allowing low energy consumption and few requirements in terms of the control of the bath.